

## CLAIMS

1. A 7-in-1 card reader for a PCMCIA interface, said card reader comprises:
  - a cartridge having a shape in coincidence with an insertion slot of said PCMCIA interface, and being provided therein with an electric connecting circuit;
  - a first connector of a specification in coincidence with that of said PCMCIA interface, being fixed on a front side of said cartridge to connect with said electric connecting circuit;
  - 10 a second connector provided on a read end of said cartridge to connect with said electric connecting circuit, and having a plurality of insertion slots for memory cards of specifications including those of CF, MD, MMC, MS and SD memory cards on a side thereof other than another side connecting with said electric connecting circuit, connecting pins are provided at said insertion slots to connect with said connecting circuit;
  - 15 a third connector provided on said read end of said cartridge to connect with said electric connecting circuit, and having an insertion slot for memory cards of specifications including those of SM and XD memory cards on a side thereof other than said another side connecting with said electric connecting circuit;
  - 20 thereby a card reader is formed for connecting an electric device and for inserting therein and connecting thereto memory cards taken among those of seven specifications, that is to say, those of CF, MD, MMC, MS, SD, SM and XD memory cards through said

PCMCIA interface as well as for proceeding to data reading, exchanging and transferring with said electric device.

2. The 7-in-1 card reader for a PCMCIA interface as in claim 1, wherein one of said insertion slots on said second connector 5 is common for an MMC memory card and an SD memory card, said insertion slot is provided on an inner side thereof with a channel with a width and a thickness in coincidence with those of an MMC memory card and an SD memory card to prevent wrong insertion of a memory card.

10 3. The 7-in-1 card reader for a PCMCIA interface as in claim 1, wherein one of said insertion slots on said second connector is common for a CF memory card and an MD memory card, said insertion slot is provided on an inner side thereof with a channel with a width and a thickness in coincidence with those 15 of an CF memory card and an MD memory card to prevent wrong insertion of a memory card.

4. The 7-in-1 card reader for a PCMCIA interface as in claim 1, wherein said first connector is connected with said connecting circuit by using said connecting pins, a coupling 20 part provided on a side of said first connector other than said another side connecting with said connecting circuit forming inserting connection with said PCMCIA interface; said cartridge has an upper cover and a lower cover to envelop a part of a main body of said connecting circuit and a part a main body of said 25 first connector to expose said coupling part of said first

connecter at said front side of said cartridge.

5. The 7-in-1 card reader for a PCMCIA interface as in claim 1, wherein said cartridge is provided on a rear part thereof with a cover to envelop main parts of said second and third connecters.

6. The 7-in-1 card reader for a PCMCIA interface as in claim 1, wherein said cartridge is provided on a rear part thereof with a cover to envelop main parts of said second and third connecters, said cover is further provided with indicating lights connecting 10 respectively to said insertion slots of said second and third connecters; said indicating lights show states of operation of memory cards in said insertion slots.

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